

Amendment to the Abstract:

Please replace the Abstract with the following amended Abstract:

Abstract

The present invention relates to methods and kits for detecting the presence or absence of (or quantitating) target nucleic acid sequences using ligation and amplification. In some embodiments, a plurality of target nucleic acid sequences are queried in a multiplexed ligation reaction, wherein each of a plurality of ligation probe sets query a given target nucleic acid. Each ligation probe set can comprise primer-specific portions that encode the identity of a particular target nucleic acid. The products of the ligation reaction can be divided into a plurality of lower-plex PCR amplification reactions, wherein the primers in a particular PCR can decode the presence or absence (or quantity of) each of the plurality of target nucleic acids based on the primer-specific portions encoded by the ligation probe set.